

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of:

**Carles Borrego Bel et al.**

Group Art Unit: 2836

Examiner: Dru Parries

Serial No.: 10/707,922

Filed: January 26, 2004

For: ELECTRICAL DISTRIBUTION SYSTEM AND METHOD FOR A VEHICLE  
WITH TWO NETWORKS HAVING DIFFERENT VOLTAGE LEVELS

Docket No.: LEAR 8136ES PUSA

**REPLY BRIEF UNDER 37 C.F.R. § 41.41**

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Commissioner for Patents  
U.S. Patent & Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This Reply Brief is in response to the Examiner's Answer mailed on February 23, 2009 for the above-identified patent application.

**VII. ARGUMENT**

**A. Claims 16-21, 23-26, and 28 Stand Rejected  
Under 35 U.S.C. § 103(a) as Being Unpatentable  
Over *Pinas et al.*, *Maeda* and *Schaal***

Claims 16-21, 23-26, and 28 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Pinas et al.* U.S. Patent No. 6,507,506, in view of *Maeda* U.S. Patent No. 6,340,848, and *Schaal* U.S. Patent No. 5,625,546.

1. **Claim 16 Is Separately Patentable Under  
35 U.S.C. § 103(a) Over *Pinas et al.*, *Maeda*, and *Schaal***

The Examiner agrees that the inverters of *Schaal* are not the same as the presently claimed first and second DC/DC converters (see Examiner's Answer pp.6, §10, ll. 22 - pp. 7, §10, ll. 1). The Examiner states that "the combined invention teaches a plurality of DC/DC converters powering a plurality of loads via **the method taught in Schaal [sic].**" (See, Examiner's Answer pp. 7, §10, ll. 3-5, emphasis added).

The Examiner further states:

It also would have been obvious to one of ordinary skill in the art at the time of the invention to implement Schaal's [sic] plurality of DC/DC converters in each of the distribution boxes and **his method of supplying power to each load to be able to supply the exact right amount of power to each load at any given time** and subsequently minimize power losses and in turn save money.

(See, Examiner's Answer, pp. 4, §3, ll. 18-22, emphasis added)

*Schaal's* method is incapable of being added to *Pinas et al.* *Schaal* provides "[a] method for allocating at least one static inverter to at least one load [.]" (See, col. 13, ll. 45-47). In particular, *Schaal's* method provides for connecting a plurality of static inverters (1, 2, 3) to a load (61, 71) so that such a load (61, 71) is supplied with an AC based output (or current). (See, col. 13, ll. 47-50 and Figure 1-2). Because *Schaal's* method requires that the load (62, 72) receive the AC based output, *Schaal's* method cannot be combined with *Pinas et al.* and *Maeda* without rendering the operation of *Pinas et al.* and/or *Maeda* inoperable for their intended purpose. For example, loads coupled to the DC/DC converters of *Pinas et al.* and/or *Maeda* require DC based signals to operate as intended, not AC based signals as provided in *Schaal's* method. Therefore, the Examiner's rationale to add *Schaal's* method to *Pinas et al.* and/or *Maeda* is not predictable and renders the operation of *Pinas et al.* and/or *Maeda* unsatisfactory for their intended purpose. *In re Gordon*, 733 F.2d at 900. Further, the proposed addition of *Schaal's* method to the architectures

of *Pinas et al.* and *Maeda* provide no reasonable expectation of success. *In re Rinehart*, 532 F.2d at 1048. For at least these reasons, claim 16 is patentable over the proposed combination of *Pinas et al.*, *Maeda*, and *Schaal*.

**2. Claim 17 Is Separately Patentable Under  
35 U.S.C. § 103(a) Over *Pinas et al.*, *Maeda*, and *Schaal***

The above arguments presented in connection with claim 16 apply to claim 17.

For at least these reasons, claim 17 is patentable over the proposed combination of *Pinas et al.*, *Maeda*, and *Schaal*.

**3. Claim 18 Is Separately Patentable Under  
35 U.S.C. § 103(a) Over *Pinas et al.*, *Maeda*, and *Schaal***

The above arguments presented in connection with claim 16 apply to claim 18.

For at least these reasons, claim 18 is patentable over the proposed combination of *Pinas et al.*, *Maeda*, and *Schaal*.

**4. Claim 19 Is Separately Patentable Under  
35 U.S.C. § 103(a) Over *Pinas et al.*, *Maeda*, and *Schaal***

The above arguments presented in connection with claim 16 apply to claim 19.

For at least these reasons, claim 19 is patentable over the proposed combination of *Pinas et al.*, *Maeda*, and *Schaal*.

**5. Claim 20 Is Separately Patentable Under  
35 U.S.C. § 103(a) Over *Pinas et al.*, *Maeda*, and *Schaal***

The above arguments presented in connection with claim 16 apply to claim 20.

For at least these reasons, claim 20 is patentable over the proposed combination of *Pinas et al.*, *Maeda*, and *Schaal*.

**6. Claim 23 Is Separately Patentable Under  
35 U.S.C. § 103(a) Over *Pinas et al.*, *Maeda*, and *Schaal***

The above arguments presented in connection with claim 16 apply to claim 23.

For at least these reasons, claim 23 is patentable over the proposed combination of *Pinas et al.*, *Maeda*, and *Schaal*.

**7. Claim 24 Is Separately Patentable Under  
35 U.S.C. § 103(a) Over *Pinas et al.*, *Maeda*, and *Schaal***

The above arguments presented in connection with claim 16 apply to claim 24.

For at least these reasons, claim 24 is patentable over the proposed combination of *Pinas et al.*, *Maeda*, and *Schaal*.

**8. Claim 25 Is Separately Patentable Under  
35 U.S.C. § 103(a) Over *Pinas et al.*, *Maeda*, and *Schaal***

The above arguments presented in connection with claim 16 apply to claim 25.

For at least these reasons, claim 25 is patentable over the proposed combination of *Pinas et al.*, *Maeda*, and *Schaal*.

**9. Claim 28 Is Separately Patentable Under  
35 U.S.C. § 103(a) Over *Pinas et al.*, *Maeda*, and *Schaal***

The above arguments presented above in connection with claim 16 apply to claim 28.

For at least these reasons, claim 28 is patentable over the proposed combination of *Pinas et al.*, *Maeda*, and *Schaal*.

Accordingly, it is respectfully requested that this rejection be reversed.

Respectfully submitted,

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